# NUCLEAR DIVISION NEWS UNION CARBIDE a newspaper for employees of the nuclear division • union carbide corporation

Vol. 9/No. 8 April 13, 1978

# Family Day slated May 6



Computer art: 'ageless' attraction at Family Day '76

Division representatives are busy planning this year's Family Day, tentatively set for Saturday, May 6. ORNL facilities at both the X-10 and Y-12 locations will be open to the families and friends of Nuclear Division employees, DOE employees and DOE contractors.

A popular event in recent years, Family Day has proved to be one of the most effective means for acquainting employees and members of their families with the facilities and overall programs at ORNL. More than 4,000 persons attended the last Family Day, which was held May 22, 1976.

The only admission requirement is accompaniment by a badged employee. Preregistration is necessary for guests who are noncitizens. Special forms will be available so that noncitizens can receive prior approval. Nuclear Division employees should go through their division directors for approval; DOE employees and contractors must go through DOE.

A special attraction at this year's event will be the newly opened Environmental Sciences Laboratory. Featured Family Day activities include guided tours, demonstrations, displays, and exhibits depicting the various research operations conducted at ORNL.

For information about Family Day, contact one of the following division representatives:

#### **COMMITTEE MEMBERS**

Public Relations: Ed Aebischer Karen Cromer Nancy Sharp Analytical Chemistry: A. L. Harrod Biology: D. P. Allison Chemical Technology: V. A. DeCarlo Computer Sciences: Richard Green Sherrill Smith Employee Relations: John Dougherty Engineering, ORNL: Ray Evans Engineering Technology: Mitch Olszewski Energy: Ralph E. Green Environmental Sciences: Ron McConathy Finance and Materials: W. O. Graves Fusion Energy: Harold W. Jernigan Health: Jerrie C. Sands Health and Safety Research: H. C. Schweinler Industrial Safety and Applied Health Physics: Tom Burnett Information: Jean Auxier Instrumentation and Controls: W. P. Kinser Laboratory Protection: Shields Smith Metals and Ceramics: James L. Johnson Neutron Physics: H. A. Todd Operations: G. J. Dixon Plant and Equipment: D. Brogan Quality Assurance and Inspection: P. S. Lee Solid State: J. T. Howe

## Activities honor Oak Ridge, Paducah secretaries

Secretaries Week will be observed April 23-29. Secretaries Day is designated as Wednesday, April 26. This event is sponsored each year by the National Secretaries Association (International). The purpose is twofold: to remind secretaries of their responsibilities to their profession and to bring recognition to secretaries for their vital role in business, industry, education, government and the professions.

Sheila Thornton, president of the Oak Ridge Chapter of NSA, has received a proclamation from Governor Blanton and a special message from President Carter. In addition, several supportive letters from local officials have been received.

#### Full schedule

In conjunction with Secretaries Week, the Oak Ridge Chapter will sponsor an "Early Bird Breakfast Buffet" for all Oak Ridge area secretaries on April 26. The buffet breakfast will be served from 6:30 to 8 a.m. at the Royal Scotsman Inn. All area secretaries are invited to attend. Tickets are \$2.50 and can be obtained from Sandra Vaughan, extension 3-7709, Anne Caylor, 3-6600, or Helen Light, 3-9651.

The Paducah-Kentucky Lake Chapter of NSA has a full schedule also to mark Secretaries Week. On April 21, all state chapters will gather in Frankfurt as Gov. Carroll signs the proclamation, and Mrs. Carroll will host a coffee for the secretaries. Lt. Gov. Thelma Stovall will host a dessert for them in the afternoon.

On April 23, the Holiday Inn, Paducah, will host a spring breakfast honoring local secretaries, and on April 26, Dolly McNutt, district representative for NSA, will speak at Executive Night at the Paducah Civic Center. Boss of the year and secretary of the year will be announced.

David Hay, a local psychic, will speak at the luncheon on April 29 at the Peddler Steak House, where the secretary of the year will be honored.

The Oak Ridge Chapter of NSA is busily readying for the state convention, to be held in Gatlinburg May 19, 20. Oak Ridge is hosting this year's conference, with Barbara White, secretary to the director of ORNL, as chairman.

Roger F. Hibbs, President, Nuclear Division, has issued the following message in recognition of Secretaries

"It is a pleasure to convey best wishes to the secretarial profession during Secretaries Week. The Nuclear Division of Union Carbide employs more than 600 secretaries, each of whom plays a vital role in the success of our operation. We are especially proud that during their employment some 107 have been certified as professional secretaries, or an average of four a year since the inception of the certification program in 1953. We have enthusiastically supported this particular effort sponsored by the National Secretaries Association, as well as the other worthy endeavors of this fine organization."

## About people...

## **CPS** Queener secretary of the year



Ellen B. Queener, a Certified Professional Secretary (CPS) in the Field Maintenance Department at ORGDP has been named secretary of the year by the Oak Ridge Chapter, National Secretaries Association.

Queener was selected by a committee of the five most recent recipients of the Margaret Stewart Memorial Cup. The award is presented annually to a member of the Oak Ridge Chapter for outstanding contributions and dedication to chapter goals and to the secretarial profession. She has also been nominated by the local chapter as candidate for vice president of the Tennessee Division of the National Secretaries Association (International).

The Ewing, Va., native has a Bachelor of Arts degree in business education from Lincoln Memorial University.

Her husband, Herman, works in the Plant and Equipment Division at ORNL.

#### Hart statement

Robert J. Hart, Manager, ORO, has made the following statement: "It is essential that secretaries have the same qualities that are so highly desirable in all professional staffs. In the Department of Energy we deal in areas of prime importance to our country and, therefore, have an overriding need for dedication to excellence. We are very fortunate that we have secretaries who share this dedication with management and plan an increasingly important role as professional staff.'

## anniversaries...





Redman Roberts

#### ORNL 35 YEARS

Clyde H. Roberts Sr., supervisor of the media kitchens in the Biology Division, began his company service as a guard on April 8, 1943. He served 21 years as a captain in the Laboratory Protection Division, and also worked in the Maintenance and Biology Divisions. In 1971 Roberts assumed his present position in Biology where he also serves as the Division Labor Relations Representative.

A native of Knoxville, Roberts was employed by Rose Mortuary before joining Union Carbide. He is a member of the Tennessee Law Enforcement Officers Association.

Roberts and his wife, Helen, live at 7921 North Forest Road, Knoxville. They have two children, Clyde H. Jr. and Clark.

John D. Redman began working for Union Carbide Linde Air Division in New York on April 20, 1943, as a chemical operator in the uranium ore processing plant. In 1944, as a chemist in Quality Control, he came to the Y-12 Plant with Tennessee Eastman. In

1947 he transferred to the Materials Chemistry Division and became a Carbide employee again later that year when Carbide assumed responsibility for the Y-12 Plant. Redman's division became a part of ORNL in 1948, and since that time he has been a chemist in three divisions: Reactor Chemistry, Chemical Technology and Chemistry, where he now works.

Redman is a native of Cynthiana, Ind., and holds a B.S. degree from Indiana University. He is a member of the American Chemical Society and the American Mass Spectrometric Society.

He and his wife, Jean, an employee in ORNL's Solid State Division, live at Route 17, Knoxville.

#### 30 YEARS

Claude C. Haws Jr., Chemical Technology.

#### 25 YEARS

Bobby G. Pierce, Robert W. McClung, Boone H. Anderson, James L. Lovvorn, Stanton A. MacIntyre and Carl R. Mason.

#### 20 YEARS

Russell L. Robinson, William N. Shipley, Charles E. Stephens and Robert D. Williamson.

#### **ORGDP**

25 YEARS

Joe D. Vannoy, William C. Toomey, John H. Metcalf and Robert L. White.

#### Y-12 PLANT

30 YEARS

Samuel T. Benton, Development Division; and Robert J. McAlister, Chemical Services.

## wanted...

#### ORNL

RIDE ONLY from Woodland area, Pembroke Road, Oak Ridge, to East Portal straight days. Katherine Cook, plant phone 3-1703, home phone 482-5768

CAR POOL MEMBER from West Haven Subdivision, Knoxville, to East Portal, 8-4:30. Debra Swaggerty, plant phone 3-1987, home phone 522-1834.

CAR POOL MEMBERS to share driving from West Hills or Deane Hill areas, Knoxville, to East Portal, 8-4:30. Chris Flanary or Mildred Gregg, plant phones 3-6366 and 3-1836, respectively.

CAR POOL from Emory Heights, Oak Ridge, to East Portal or East Parking area, 8:15-4:45. Gerry Scott, plant phone 3-1922, home phone 482-

RIDE OR JOIN CAR POOL from Lovell Road area, Knoxville, to East Portal, straight days. Linda Jeffers, plant phone 3-0264.

RIDER WANTED from Karns/Ball Camp area, Knoxville, to any portal, 8-4:30. Neil Griffith, plant phone 3-6422, home phone 690-1876.

#### 25 YEARS

Ozell P. Wilson, James Lefevers, Sam J. Davis, Bobbie O. Miller, Luther Thurman Jr., Raymond K. Barnett, Roland E. Plemons, James P. Cook, Billy F. Wright, Samuel D. Rea, Donald F. Bougrand, Edward P. Bostic, James S. Peterman, Daniel B. Braden, Glen D. Mowery, Norman L. Dykes, Harrison H. Williams Jr., Harley L. Bridges, William A. Ägee, Dennis Bridges, Edward K. Beeler, Harvey Bridges Jr., Thomas J. Wilson, James P. Grubb, Marvin H. Huskey, Dewey L. Dagley, Ernest E. Jenkins, Milas L. Sweet, Woodrow W. Onstott and Arthur J. Gilliam Jr.

## Road work starts on Bear Creek

The cut-off road between Bear Creek Road and Highway 95 is being modified this week. In the future, it will be a one-way passage for westbound traffic.

Construction will consist of stripping, setting guard rails, placement of signs and improvements to islands in order to improve the traffic flow on this road.

The usual caution will be required during the construction period.

Try to schedule use of your clothes washer, clothes dryer and dishwasher in the early morning or later evening hours. These are offpeak times. Such scheduling will help reduce the demand on electric utilities.

The next issue will be dated April 27. The deadline is April 19.

#### division death. . .

Jack P. Greene, a member of the Y-12 Guard Department, died April 3 in a Johnson City hospital. A native of Bakersville, N.C., he joined Union Carbide in 1969 after working with Greene's Hardware and Supply Company in Kingsport. He served in the U.S. Navy.

Survivors include his wife, Myrl Floyd Green, Y-12's Security Division; a daughter, Paula; a sister, Georgia James; and his mother, Mamie.



Funeral services were held at Mr. Greene the Webb Funeral Home, Spruce Pine, N.C., with burial in Bakersville Memorial Cemetery.





## P&E Safe Worker Awards

Two ORNL Plant and Equipment groups were presented 1977 Superintendent's Safe Worker Awards. For the second time, the Area and Special Shops section, Fabrication Department, received an "excellent" rating for only one serious injury charged; for the third time, the West Research Services Department received a "good" rating for only two recordable injuries.

This program began in 1973 at which time the Nuclear Division dropped the use of the number of serious injuries charged in determining annual safety awards. P&E was divided into 10 groups—each eligible for this award if the entire year could be worked without being charged with a serious injury.

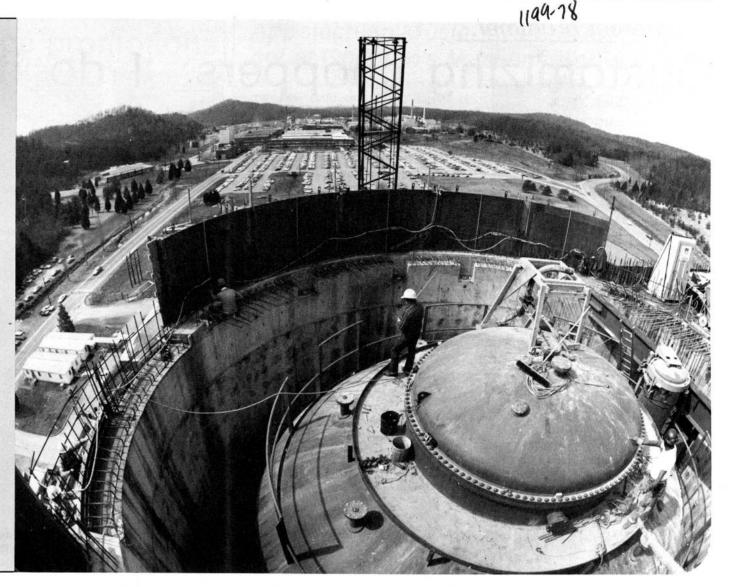
Atop Holifield. . .

## Bird's eye view

Construction continues on ORNL's Holifield Heavy Ion Research Facility. The photo shows the top of the 100-foot pressure vessel that will contain a 25-million-volt electrostatic accelerator and an insulating gas. Construction workers are setting up forms for the next concrete pour.

The tower, presently at the 140-foot level, will rise to a completed height of 165 feet early this summer. Fabrication of the pressure vessel has been completed, as have all of the structural and pressure tests. The facility has recently received 40,000 pounds of the 280,000 pounds of sulfur hexaflouride insulating gas. The gas is stored in three large steel pressure vessels located behind the tower.

When completed in late 1979, the \$18 million Holifield Heavy Ion Research Facility will become this country's most advanced tool for studying the interaction of heavy, charged particles of matter.



### question box...

If you have questions on company policy, write the Editor, **Nuclear Division News** (or telephone your question in, either to the editor, or to your plant contact). Space limitations may require some editing, but pertinent subject matter will not be omitted. Your name will not be used, and you will be given a personal answer if you so desire.

#### **Promotion policies**

QUESTION: What is Wage and Salary's policy on promotions? An employee was put in for a promotion, it was signed and approved all the way to W & S, then turned down. It was put through again at a later date and turned down again. What are the reasons involved? Why should this employee be turned down for a promotion?

ANSWER: A function of the Wage and Salary Office is to provide advice to the divisional managers on job content for jobs throughout the organization. When a division is considering an employee for a possible promotion, Wage and Salary reviews the employee's job duties and makes a recommendation as to the consistency of the promotion with others throughout the Nuclear Division. In this way a proper relationship is maintained between job title, job level, and job responsibilities.

When a proposed promotion is found to be inconsistent with the level of the individual's job responsibilities, Wage and Salary points out the weaknesses to the divisional line manager and recommends that the promotion be held until the criteria for the position are met

#### Service recognition

QUESTION: For many years Union Carbide has given its employees an award and certificate in recognition of 25 years of service. Would the Company consider engraving the certificate on metal with a wood backing? I have inquired of several employees who are approaching the 25-year plateau, and all preferred the certificate engraved on metal, if the cost is not prohibitive.

ANSWER: Your question is a good one and has been given careful consideration. The metal plaque which is used for retirement certificates is attractive. We believe the 25-year certificate being used, which is heavily engraved on high-grade parchment paper with the UCC seal attached, is also attractive. There is a considerable difference in cost. We do not plan on making such a change at this time.

#### Company service credit

QUESTION: Length of service in the weekly salaried group is used only in scheduling vacation and in some departments shift preferences. When someone voluntarily quits for another job, returns and after working the required two years, picks up his time again, does this employee have rights over people with less Company service time but longer continuous service time?

ANSWER: Vacation scheduling and shift assignments are handled in a variety of ways in our salaried groups. Where Company service credit is the determining factor, total Company service credit governs, not the time since last hired.

#### Piped-in music

QUESTION: Why is piped-in music available in other parts of the plant, but not in the administration building at Y-12?

ANSWER: The same sound system was being used by Y-12 for the piped-in music and for use as a public address system. Since the former interfered with the system's use for emergency or other announcements, some months ago Y-12 management decided to discontinue the piped-in music throughout the plant.

## Golf activities planned at Paducah

Special golf lessons for women will begin Monday, May 1, at 5:30 p.m. at Paxton Park for employees and wives at the Paducah Plant. The sessions will run all through May, and league play is set to begin June 12. The price is \$2 per session, or \$10 for the entire course. It will offer an introduction to golf rules and etiquette for beginners.

League play will be on alternate Mondays, at 5 p.m. at Paxton Park, and will continue through September

Men's golf, in league play, will commence at 5:30 Tuesday May 2, at Paxton. Additional information, or registration, may be obtained through Marty Curtis, Bell 442, or PAX 386.

More recreational information may be obtained from Darlene MacPherson, Bell 208. wanted...



#### Y-12 PLANT

JOIN CAR POOL from West Hill Elementary School area, Knoxville, to North or East Portal. Dick Wieland, plant phone 3-7996, home phone Knoxville 588-9436.

CAR POOL MEMBERS from Amhurst Road, Arrowood Road vicinity, Oak Ridge, to North Portal, straight day. John Hermes, plant phone 3-7267; or Angie Puckett, 3-5453.

TWO VAN RIDERS from West Hills/West Town Mall, Middlebrook Pike, via Walker Springs Road to East, North, Central or Bear Creek Portals, straight day. J. K. Chance, plant phone 3-5989, home phone Knoxville 690-2648.

#### ORGDP

VAN POOL RIDER from Cumberland Estates area, Knoxville, straight day. Steve Shipley, plant phone 3-3661, home phone Knoxville 588-8660.

CAR POOL MEMBER from Kingsgate area, Concord, to Portal 2 and 4, 7:45-4:15 shift. George Nagy, plant phone 3-9392, home phone Concord 966-6872.

RIDE WANTED or join CAR POOL from Lenoir City or vicinity to West Portal, "G" Shift. Fred Bledsoe, plant ext. 3-5505, home phone 986-2600.

RIDE WANTED or join CAR POOL from New York Avenue, Oak Ridge, to Portal 4, straight day. Ralph Ford, plant ext. 3-3073, home 483-9694.

#### A different drummer...

Customizing choppers: 'I do it my way!'

by Cecil Clark (as told to Eugene E. Clark)

Editor's Note—Last December Cecil Clark, a refrigeration mechanic in ORGDP's Fabrication and Maintenance Division, revitalized a CB750 to enter in a custom motorcycle show in Knoxville. Read the following "different drummer" to see how he faired.

A Nuclear Division employee for more than nine years, Clark attended Knoxville College and lives in Knoxville.

His fellow ORGDP employee, Eugene E. Clark (no relation), was kind enough to write the article.

My interest in cars and motorcycles started when I was very young and was nurtured by my family. My father was a part-time auto mechanic, who was always working on cars in his spare time. He not only repaired cars, but he customized a few of his own. His most memorable creation was a Kaiser automobile with an Oldsmobile engine. Dad fabricated and installed air spoilers on this car long before the Detroit manufacturers put them on production cars.

Three of my older brothers were into cars, also. Hot rodding and drag racing were very popular at that time, and they were very successful at both. Growing up under these influences, I naturally became attached to mechanical things.

'I was able to transform this "plain Jane" into a neat little chopper.'

My first motorcycle was a 650cc BSA (Birmingham Small Arms). This was a slick handling, smooth running little bike, but I wasn't satisfied with the way it looked. Following in my father's footsteps, I decided to customize it. Given some time and a little money, I was able to transform this "plain Jane" into a neat little chopper. I had many good times riding this bike, but I soon yearned for something larger and faster.

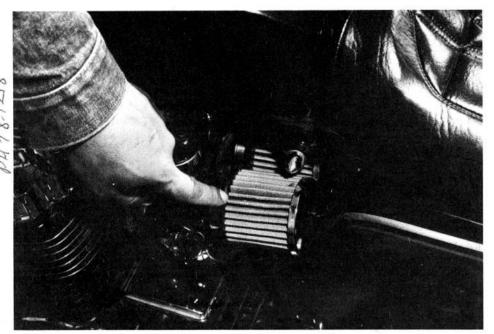
I sold the BSA and started looking for something more exiciting. Around this time my brother informed me of a great buy on a CB750 Honda. I was a bit hesitant on buying the big Honda because I simply wasn't interested in a big, fat touring motorcycle. One ride on my brother's modified CB750 convinced me that this mild-mannered touring machine could be easily transformed into something more dynamic.

I bought the CB750 and immediately began to visualize certain changes. Although the bike was smooth and moderately powerful, it was also heavy and bulky looking. Changes had to occur before this machine and I could have a meaningful relationship.

My father taught me that when customizing anything you must have an image of what you are working toward; otherwise, you will end up with an assortment of parts that do not harmonize. I visualized my bike as appearing lean, clean and mean.



Motorcycle musts: helmet, safety glasses



Lowering blocks—part of suspension system improves maneuverability



Disc brake drilled to lighten bike

The first objective was to lighten the appearance of the machine. The bulky gas tank was replaced with a slim-line fiber glass tank. The seat was trimmed and reupholstered; the huge speedometer and tachometer were replaced by a set of chromed mini gauges. Custom mounts were fabricated to mount the gauges. The wide stock handlebars were discarded and replaced with narrow cafe bars. These changes not only cleaned up the appearance of the bike but also reduced the overall weight.

Moving to the front of the bike, the disc brake was drilled with holes to lighten the weight of the metal. These holes were drilled in a definite geometric pattern to insure proper balancing. A touch of class was added by replacing the stock wheel rims with Italian made aluminum-alloy racing rims. The rims were laced to the hub with heavy duty stainless steel spokes. For beauty the lower fork legs were chrome-plated and Nortontype fork boots were installed.

The rear end of the bike was lowered by replacing the stock 18-inch tire and rim with a 16-inch Harley Davidson tire and rim. Lowering blocks were also installed. The swing arm was chrome-plated to accent the rear of the machine.

'...time and tender love and care.'

Gas tank and side covers were custom painted in iridescent black lacquer. Various screws, bolts and clamps were chrome or brass-plated to accent the black paint scheme. The engine was sprayed with high-temperature black paint, and the side plates were chrome-plated.

The engine was modified for increased performance. The engine displacement was increased from 750cc's to 811cc's by installing a big bore piston kit. Specially heat treated connecting rods were installed for reliability. A high performance cam

and heavy duty valve springs were installed. To promote greater breathing capacity at high rpm, the ports and the carburetors were modified. A tuned length four-into-one exhaust system was also installed. High output ignition coils were used to light the fire. The stock clutch was beefed up to handle the additional horsepower.

'Holes were drilled in a definite geometric pattern to insure proper balancing.'

Last December I entered this bike in a custom motorcycle show in Knoxville. To my surprise I won first place in the Japanese Street Class. That prize made all the effort worthwhile

My next project is to customize an old 1961 VW. It looks pretty crude now, but with a little time and some tender love and care it can become a real eye-catcher.

I suppose my hobby has produced many headaches and skinned knuckles. It has certainly lightened my bank account. However, I have the satisfaction of knowing that when I ride the streets I won't be seeing double. In this age of mass production and mass sameness, it's hard to be different. Nevertheless, when it comes to my machines...I do it my way.

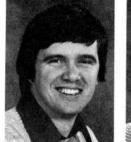
#### Recreationote. . .

Golf League forming

The Dead Horse Lake Golf League is now forming for summer action. Twosomes or singles should call the Recreation Office, extension 3-5833, for additional information.

## Y-12 Maintenance promotions





**Poling** 



ibson





Hash



Stoetzel



Menefee No

The Y-12 Maintenance Division has announced the promotions of eight more planner and estimators. They are Hoyt C. Gibson, Jerry W. Hash, Jack C. Menefee, Charles R. Nichols, Ronnie S. Norris, Steven G. Poling, James F. Stoetzel and Robert L. Whittaker.

Gibson, a native of Sweetwater, was self-employed as a carpenter and worked with the Tennessee Valley Authority before joining Union Carbide more than four years ago.

He and his wife, the former Brenda McCosh, live on Oakland Road, Sweetwater. They have two sons, Greg and Jeff.

Hash was born in Morristown, and worked there with American Enka Corporation before coming to Y-12 in 1969.

He has a son Jerry, and lives at Route 4, Clinton.

Menefee is a native of West Virginia. He worked with RCA at Cape Canaveral before joining Union Carbide eight years ago.

Mrs. Menefee is the former Beatrice Hawk. They live at 456 West Outer Drive, Oak Ridge, with their children, Ken, Richard, James, Shawn and Eric.

Nichols is a native of Monroe County, Tenn. He worked overseas for an oil exploration company before joining Union Carbide eight years ago.

He and his wife, the former Barbara Irwin, live at Route 10, Crestview Drive, Maryville, with their daughter, Sherri.

Norris is a native of Jamestown, and served in the U.S. Marine Corps five years before joining Union Carbide in 1972.

He and his wife, Lindy, live at Route 17, Melton View Lane, Knoxville. They have a son, Ricky.

Poling is a native of Chicago. He has been at Y-12 almost two years.

Mrs. Poling is the former Cynthia Whitaker. They live at Route 1, Prima Estates, Morristown, with their children, Robert and Elizabeth.

Stoetzel was born in Dubuque, lowa, but grew up in Oak Ridge. He is a graduate of Roane State Community College. He worked with ORTEC, Inc. before joining Union Carbide in 1969.

He and his wife, the former Vickie Bradford, live at 118 Cahill Lane, Oak Ridge. They have three children, Donald, Matthew and Lisa.

Whittaker is a native of Knox County. He worked with the H. P. Nicely Paint Company and Sentell Paint before coming to Y-12 eight years ago. He lives at Route 18, Knoxville.

## Appalachian Music, Craft festival set at Children's Museum, April 28, 29

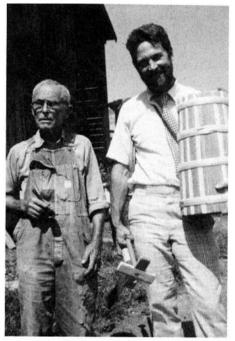
Many Nuclear Division employees and their families will participate in the Fifth Annual Appalachian Music and Craft Festival, April 28 and 29 at the Oak Ridge Children's Museum.

A variety of events are planned for this year's festival crowd:

- An old-fashioned hoedown with bluegrass and country music, clogging and square dancing is the main attraction on Friday evening, April 28. Also included in that evening's program is a fiddling contest featuring junior and senior divisions in fiddle, guitar, mandolin and harmonica competition. The contest is open to persons of all ages and with all ranges of "fiddlin" experience.
- Over 36 area craftsmen will be the festival's highlight on Saturday, April 29. Beginning at 1 p.m., festival attenders can witness various area artists at work. Some of the featured specialities include pottery making, pen and ink sketches, furniture making and wood carving, cotton ginning and spinning, whittling and musical instrument making.

Eighty-seven-year-old Alex Stewart, well-known East Tennessee barrel-maker will be honored Saturday afternoon in a special dedication, "Celebration of the Life of Alex Stewart." This exhibit—a permanent addition to the museum—will include complete samples of Stewart's lifetime works.

• Students of all ages will be competing for top honors in the festival's essay competition, featuring the theme "My Appalachian Heritage—What It Means to Me." And the competitive spirit will continue as 4-H members and leaders award ribbons and prizes to festival attenders entering the top jellies, jams, pickles, beans, relishes, applesauce, sweet breads, yeast breads and cakes.



COOPERING—Bill Henry, ORNL Operations Division, right, with his mentor, Alex Stewart, will demonstrate the lost art of coopering, April 28, 29 at the Children's Museum.

• Dinner on the ground, including barbecue, beans, slaw, cornbread and stackcakes, will be served from 5-7 p.m.

Rounding out the event is the Jean Ritchie Folk Festival Saturday night at 7. Eighteen Berea College students will accompany the ballad singer with sword dances, Appalachian folk dances and Danish dances.

Tickets are \$2 for adults and \$1 for children and cover all festival activities. Special group rates are available to groups of ten or more. Advance tickets may be purchased at Jackson Square Pharmacy in Oak Ridge.

Selma Shapiro, wife of ORNL's Ted Shapiro, is coordinator of the two-day event.

## Two promoted at ORGDP

Two promotions have been announced at ORGDP. William R. Hamby has been named a field quality representative in Technical Services and Stephen P. Parks has been named power operations supervisor in Operations.

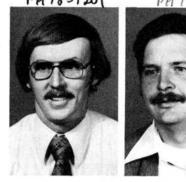
Hamby, a native of Clinton, joined Union Carbide in 1976 after serving 20 years in the U.S. Navy.

He is married to the former Delores L. Lane of Steubenville, Oh. The Hambys live at Route 3, Oliver Springs with their three children, Peggy Ann,

Brandy and William.

Parks, a Lake City native, has been at ORGDP for more than four years. He attended Roane State Community

Parks and his wife Rhonda Joy live at Route 1, Oliver Springs with their daughter Whitney Elizabeth.



**Parks** 

Hamby

### patent granted. . .

To Walter P. Eatherly, J. M. Robbins and David E. Rosson Sr., all of ORNL, for "Method of Fabricating Graphite for Use as a Skeletal Prosthesis and Product Thereof."



150-YEAR-OLD LATHE—Dick Busey operates a 150-year-old lathe, as his son Clifford, Y-12 Engineering, watches as an apprentice. The lathe will be demonstrated at the Applachian Music and Craft Festival April 28, 29.

## recreationotes... Carbide bowling

Y-12 C. . .

The Rounders continue to lead over the Mini-Strikes in the Y-12 "C' League. The Rounders also hold their lead on the season high team series with a 3177.

Y-12 Classic. . .

The Eightballs and Has Beens keep passing the lead back and forth in the Y-12 Classic League. The Eightballs now lead by two points. Bill Ladd took top honors again last week. He rolled a 256/262 game with a 662/680 series. This week he won also rolling a 245/250 game; 671/686 series.

#### K-25 Tuesday Men's. . .

The All-Stars have overcome the City Slickers by a half point in the K-25 Tuesday Men's League. J. D. Luigs won the high honor this week for game rolling a 221/244. M. N. Strickland had high scratch series with a 573.

#### K-25 Wednesday Men's...

Sues Sooners lead the K-25 Wednesday Men's League over the Protectors. Danny Stoetzel, of the Losers, won the weekly prize for high game rolling a 244. Buck Stout, Sues Sooners, took the high series with a

#### ORNL "C"...

The ORNL "C" League is led by the Alley Rads. The Remkeys won high series with handicap rolling a 2990. Roy Clark, also of the Remkeys, won high handicap series with a 666.

#### ORNL Ladies. . .

The Mousechasers are eight games ahead in the ORNL Ladies League. Georgia Gwinn, of the Mousechasers, won weekly prizes rolling a 188/495 scratch series.

#### Carbide Shifters Mixed. . .

The 2+2 lead by four points over the Ups & Downs in the Carbide Shifters League. Jan Whittlesey and Joe Murphy hold the season high handicap games; Jan with a 221, and Joe with a 256.

#### ORGDP Women's. . .

The Up-Towners continue to hold a strong lead over the Payoffs in the ORGDP Women's League. Alice Guffey was this week's bowler rolling a 224-206-220=650 handicap series. Alice bowls with the Out-of-Towners.

#### Carbide Family Mixed. . .

The Oops lead the Family Mixed over the Chokers this week. Harold Zang, of the Challengers, rolled the high scratch series for men with a 573. Janie Sharp won for women rolling a

#### ORNL "A"...

ORAU now leads the ORNL "A" League over the Zots. The Fireballs won the weekly prize for high handicap series with a 2945. Thompson, of the Half Frames, received the high handicap series with a 657. Forde, of the Ten Pins, won high handicap game with a 267. McCulloch, of the Limits, rolled a 230 scratch game to win that prize.

#### Western Plaza Mixed. . .

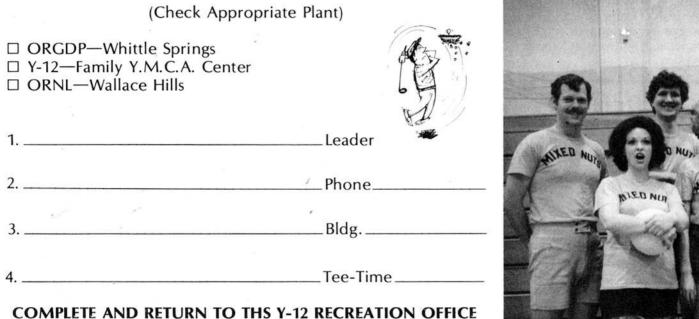
Three games separate the top five teams in Western Plaza Mixed League. The Roadrunners and Bowlderdash are tied for first place. One game behind is the Four Eagles, followed by the Hi Lo's who are two games out, and then the Chargers.



ATOMIC CHAMPS—The Diggers 3 took the single elimination contest in the Atomic League, winding down volleyball action for the year. In the front row from left are W. Hightower and Bob Seyfried. In the rear are M. Albert, D. Raymer, F. Wetzel, B. Marshall and T. Riley.



NUCLEAR CHAMPS—The Skinks took the crown in the Nuclear League volleyball action. In the front row are A. Pasto, M. Travaglini and J. Mack. In the rear are L. Stinton, D. Stinton, R. Swain, J. Carpenter and S. Cook.



## Entries must be received prior to drawing on April 26, 1978.

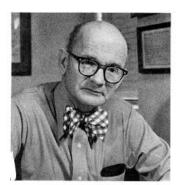
Tee-off times for all tournaments will be drawn on Wednesdays prior to each Saturday's tournament. Golfers are responsible for reserving their own carts by contacting the pro shop following drawing for tee-off times. Please call the Recreation Department, 3-5833, after 3 p.m., Wednesday for your time.

**BUILDING 9711-5, MS-001** 

Tee-Off Time Application for April 29, 1978



CARBON WINNERS—The Mixed Nuts won all the laurels volleying better than other teams in the Carbon League. In the front row are L. T. Beck, E. F. Gibson, M. C. Turner and M. T. Wolfenbarger. In the rear are W. A. Burnett, D. W. Turner, M. L. Bennett, D. F. Dickerson and W. R. Musick.



# Viral hepatitis and its prevention

by T. A. Lincoln, M.D.

(Editor's Note: Dr. Lincoln alternates his regular column with "Medicine Chest," where he answers questions from employees concerning health matters. Questions are handled in strict confidence, as they are handled in our "Question Box." Address your question to "Medicine Chest," Nuclear Division News, Building 9704-2, Mail Stop 20, or call the news editor in your plant.)

When a fellow worker, friend or relative develops hepatitis—an infection or inflammation of the liver—there is usually a scramble to get protected. Frantic calls are made to physicians, either seeking an injection of gamma globulin or asking whether or not they should be concerned.

This article cannot possibly anticipate or answer all the questions that might arise. It will review basic epidemiology and, hopefully, help readers appreciate some of the complexities of this disease.

#### "Silent" infections

Viral hepatitis is a major public health problem because some infections cause prolonged illnesses and can lead to chronic infections and carrier states. What physicians see as obvious clinical illnesses are only the "tip of the icebergs." Many infections are so mild they are never detected. These "silent" infections are just as important as a source of other infections as those which produce serious symptoms. In children, only about one out of ten cases and, in adults, only about one out of two or three are diagnosed.

The reason for this low rate of correct diagnoses is not because physicians are unskillful, but because many infections do not produce jaundice, so the disease is not suspected. If every patient with a gastroenteritis or a flu-like illness had several liver function tests performed, the diagnosis would be made much more frequently. Unfortunately, if done, the high cost of health care delivery would be further escalated, so no one is seriously suggesting such an aggressive effort.

#### Viruses A, B, C

Viral hepatitis is caused by two types of hepatitus viruses called A and B. As better diagnostic techniques have become available, it has become clear that there is almost certainly a hepatitis C virus and maybe others. Antigenic (immunologic) variants within these major types also exist. Because of these different types, people can have hepatitis more than once, even though immunity following a specific virus infection lasts a lifetime. Several cases of people having three distinct episodes of typical hepatitis—each caused by a different hepatitis virus-have been reported.

The symptoms of hepatitis A and B may vary a great deal, but from the standpoint of epidemiology and prevention, these two types of

hepatitis are enough alike to consider together. In the following brief review, the general patterns of transmission will be discussed with an indication of which is more common for each type of virus.

#### Children very vulnerable

Hepatitis viruses may gain entry into the body through the mouth (A much more then B). Although it may distress people to learn it, this route is called the fecal-oral route. Especially the hepatitis A virus (HAV) is excreted in large amounts from the liver into the gastrointestinal tract. Putting it bluntly, the hands get contaminated with the virus either by scratching the anal area or during cleansing after defecation. The virus is passed to others by direct hand contact or by contamination of food, money, water, dishes, clothing and even paper. It is easy to see why children are especially vulnerable to infection. Nail biters and people who put their fingers in their mouths obviously run an increased risk.

The viruses may be transmitted by the parenteral (blood) route (B more than A). The virus is frequently found in the blood, so any time blood or blood products are injected, a possibility of transmission can occur. A cut in the skin or any mucous membrane, when it becomes contaminated with the virus, can lead to infection. In one outbreak, contaminated computer cards were implicated, and the injection apparently occurred by handling the cards, which caused tiny scratches in the skin.

Hepatitis B virus (HBV) has been found in blood, saliva, nasal secretions, urine, feces, semen and breast milk. It doesn't take much imagination to figure out the many possible ways HBV could be transmitted. Now that highly sophisticated techniques are becoming available to study the much more elusive HAV, it is likely that it will also be found in many different body fluids.

#### Tardy symptoms

Hepatitis A virus appears in the stool as early as two to three weeks before there are any clinical symptoms and remains for seven to ten days after jaundice appears. The virus is excreted generously in patients who have no obvious clinical illness. Also, since the incubation period is long (HAV— an average of 25 to 30 days, HAB— an average of 60 to 90), it is usually impossible to precisely trace the source of an infection.

Lynn Calvert named head of ORGDP Plant Protection

O. Lynn Calvert has been named head of ORGDP's Plant Protection Department. In this capacity he will be responsible for fire protection engineering and the fire and guard departments.

He formerly was a member of the Gaseous Diffusion Reliability Review Team. Calvert has held a number of other positions at ORGDP including employment manager, K-33 building supervisor and department superintendent, chemical operations.

The Oak Ridge native has a degree in business management from American University in Washington, D.C.

He served with the United States Marine Corps and worked for the FBI before joining Union Carbide 12 years ago.



Calvert and his wife Eileen live in Oak Ridge with their two children, John and Matthew.

### 'Pool Party' dance set by Paducah

Paducah employees are all geared for their spring frolic, a "Pool Party," Friday, May 12. It will be staged at the Ken-Bar Resort, on Highway #641, near Gilbertsville. Tickets are \$12 per couple, and include admission to the dance, hors d'oeuvres, snacks, setups and breakfast.

Music will be provided by the Sounds of Steve Putteet.

Tickets are available from the following: Brenda Stokes, C-17 Lab; Curtis Chenault, C-400; Marietta Lambert, C-720; Carol Page, C-720;

Jim Freeman, C-720 Fabrication Shop; Charlene Riley, C-200; Darlene MacPherson, C-100; Doris Wilson, C-720 Converter Shop; Kathy Smith, C-300; W. D. Sykes, C-335; and Ed Cothran, C-720 Mezzanine.

### patent granted. . .

To Charles W. Greene, Karl J. Notz, Robert H. Rainey and William E. Shockley, all of ORNL, for "Method for Loading Resin Beds."

### safety scoreboard

Time worked without a lost-time accident through April 6:

Paducah258	Days	3,287,278 Man-Hours
Y-12 Plant48		1,288,000 Man-Hours
ORNL81	Days	1,802,429 Man-Hours

Prevention of viral hepatitis involves many complicated public health issues. Viral hepatitis occurring in children is usually mild and many times asymptomatic. Hepatitis in adults is usually much more debilitating. By promoting better personal hygiene and public health, we may only be increasing the number of adults who become vulnerable. It might be better to let children go ahead and have a mild attack and get it over with. The problem with such an approach would be the need to have exposure to all the different types. Type B infections can be dangerous. Encouraging childhood infection is probably not a practical alternative.

Pooled immune (gamma) globulin given during the incubation period following exposure to hepatitis A frequently prevents clinical illness but does not necessarily prevent infection. Special hyperimmune globulin against hepatitis B is now available for people exposed to contaminated blood products. All blood to be used for transfusion now has to be screened for the hepatitis

surface antigen. Many, if not all, cases of hepatitis B occurring from injection of blood products may eventually be prevented.

#### Preventative measures

When a friend develops hepatitis, it is desirable to determine what type. If fairly intimate contact has been likely during the preceding 30 to 60 days and will continue, an immune globulin injection is desirable. It will provide only passive and temporary protection. Each physician has to weigh the evidence to decide who should receive the injection.

A hepatitis B vaccine has been successfully tested in chimpanzees. It will produce active immunity probably roughly equivalent to an actual infection. This vaccine, however, is difficult to produce and may never be available for widespread use.

The solution to the hepatitis problem is still a long way off, but if progress in research continues to be as rapid in the future as it has in the past 10 years, this disease will probably eventually be eliminated or, at least, controlled.

Lab Protection promotes eight



Johnson



Edens 1352-78

Rose Justice



Brown

**Atchley** 

Rather



Lovelace

The Laboratory Protection Division at ORNL has announced eight promotions. Robert L. Atchley has been named fire chief; Harold D. Rose, guard chief; Emmitt C. B. Brown, Arvel J. Edens, Jon Walt Justice and James Hugh Rather guard captains; and James L. Johnson and Harry G. Lovelace, fire captains.

Atchley, a Knoxville native, is a 15year veteran of Union Carbide. He attends Roane State Community College, where he is nearing competion of an associate degree in fire science technology. Atchley previously was employed at Knoxville Utilities Board. He and his wife, Shirley, live at 6826 Cain Road, Knoxville. They have two children, Greg and Lori.

Rose is a Clinton native and attended the University of Tennessee before enrolling at Roane State Community College, where he is completing requirements for a degree in fire science technology. He has been with Union Carbide for 11 years, and previously worked for the Clinton Fire Department. The Roses live at 603 Riverbend Road, Clinton, and have two children, Kevin and Kristina.

Brown, a native of Rockwood, worked for Tennessee Forge and Steel before joining Carbide eight years ago. He and his wife, Abigail, have two children, Carla and Carl.

The Browns live at Route 2, Oliver

Edens, a Knoxville native, has been a Union Carbide employee for two years. Prior to joining Carbide, he spent 17 year in the Air Force and then six years with Consolidated Customers Services in Collins, Ga. He is a graduate of the Explosive Ordnance Disposal School, Indian Head, Md. Edens and his wife, Mabel, live at Route 2, East Circle, Powell.

Justice was born in Oliver Springs and has been a Carbider for four years. Before that he worked for Harvey Furniture in Oak Ridge. He attended Tennessee Tech and Roane State Community College. Justice and his wife, Kathie, a Fusion Energy Division employee, live at 115 Alger Road, Oak Ridge. They have one child, Jon Walt Jr.

Rather, a native of Wheat, Tenn., has been with Carbide for 11 years. Previously, he was employed at Oak Ridge Associated Universities. Rather and his wife, Margaret, have two children, James and Kimberly. The Rathers live at Route 3, Oliver Springs.

Johnson was born in Harlan, Ky., and attended Tennessee State Fire Training School in Murfreesboro. For eight years he worked for the Lake City Fire Department and is currently a member of the Anderson County Rescue Squad. Johnson and his wife,

about people ...



Whittaker and Dr. Garrett **ORNL Health Division director** 



Headrick

L. A. Headrick and G. Roy Whittaker, Industrial Hygiene Departments at ORGDP and ORNL, respectively, have been certified as industrial hygiene technologists by the American Board of Industrial Hygiene. The certification is awarded on the basis of work experience, academic achievements and examinations demonstrating a high level of competency in the

Headrick, who attended East Tennessee State University, has been with Union Carbide for 10 years, the last four in the Industrial Hygiene Department. He lives with his wife and two children in Townsend.

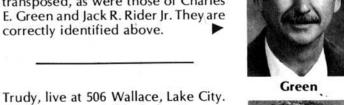
Whittaker, senior laboratory technician, has been with Carbide since 1954. He has worked previously in the Utilities Maintenance Division at ORGDP, as a machine operator at Y-12 and as a Y-12 laboratory technician in the Health Physics Department. Whittaker is a member of the Tennessee Valley section of the American Industrial Hygiene Association. He and his wife, June, a Biology Division employee, live in Powell.

#### **CORRECTION**

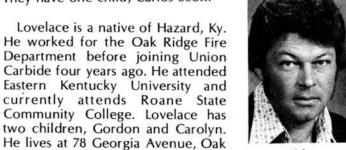
In the last issue of Nuclear Division News, the photographs of Jerry W. Hopwood and Phillip W. Twitty were transposed, as were those of Charles E. Green and Jack R. Rider Jr. They are correctly identified above.

They have one child, Carlos Scott.

two children, Gordon and Carolyn. He lives at 78 Georgia Avenue, Oak



Hopwood





Rider

**Twitty** 

UNION CARBIDE

Ridge.

#### UNION CARBIDE CORPORATION

NUCLEAR DIVISION

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